



ERTS 070

LONG ISLAND UNIVERSITY

SCIENCE ENGINEERING RESEARCH GROUP

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20 October 1972

National Aeronautics & Space Administration
Goddard Space Flight Center
Greenbelt, Maryland 20771

Gentlemen:

RE: Type I Progress Report for the Period Ending
October 15, 1972

This document is submitted herewith in reference to NASA Contract
No. NAS5-21792 and includes the following:

- A) Title of the Investigation: "An Interdisciplinary Study of the
Estuarine and Coastal Oceanography of Block Island Sound and
Adjacent New York Coastal Waters" (070)
- B) GSFC Identification Number: UN 558 (Dr. Edward Yost)
- C) "First look" analysis of the imagery was performed using a
multispectral viewer. The four images in the multispectral
bands were projected onto the screen and viewed as a composite.
The analysis revealed that for better contrast and detailed
information it was necessary to reprocess the imagery. In
the reporting period, only imagery received was for the two
consecutive satellite passes over Long Island area. Moreover,
all the frames could not be used due to the heavy cloud
coverage over the area of interest.
- D) The ground truth experiments in the Block Island Sound
and New York Bight area are also in progress. About ten
cruises for the 1972 in the area of interest have been
scheduled by the New York Ocean Science Laboratory. So
far the major problem has been the weather. The scheduled
September cruise into the New York Bight to coincide with
the satellite overpass on the 21st and 22nd had to be
aborted due to rough seas and high winds that made sampling
impossible. A total of four cruises in the Block Island
Sound were completed and three cruises have been re-
scheduled for completion in October. During the completed
cruises, samples were collected in the water column for
temperature, salinity, oxygen, nutrients, pigments, organics,

(E72-10171) AN INTERDISCIPLINARY STUDY OF
THE ESTUARINE AND COASTAL OCEANOGRAPHY OF
BLOCK ISLAND SOUND AND ADJACENT NEW YORK
COASTAL WATERS Progress E. Yost (Long
Island Univ.) 20 Oct. 1972 2 p CSCI 08H G3/13 00171
Unclas
N73-10352

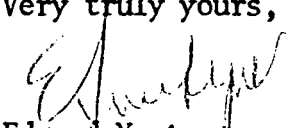
20 October 1972

phytoplankton, and optical properties. These data are currently being reduced for further analysis.

The determination of particle size of particulate matter in the water column is progressing. Problems with the pick-up of external electrical noise in the Coulter Counter have been resolved by building an isolation chamber to house the instrument. Approximately 20 percent of the sampling effort in the field has been undertaken to date, with approximately 20 percent of the laboratory effort completed.

- E) The problem in obtaining the in situ upwelling radiance and downwelling irradiance measurements has been the instability of the measuring instruments with the rocking of the research vessel even on a fairly calm sea. An effort is being made to mount the units in a way which would relatively stabilize the measuring units.
- F) Some interesting results are anticipated from the cruise on 10th of October that was carried out under clear skies following a period of stormy weather. This cruise also coincided with the satellite overpass on that date.
- G) In the next reporting period, six cruises for sampling the water masses in the area of interest are planned. The received imagery will be reprocessed and additive color analyses will be performed. The correlation of field observations with satellite imagery will also be performed.

Very truly yours,



Edward Yost
Professor and Director